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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,017	06/16/2005	Andrew Levers	540-570	7393
23117 7590 12/28/2006 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER CRANE, DANIEL C	
			ART UNIT 3725	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	
3 MONTHS			12/28/2006	
			DELIVERY MODE PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/539,017

Applicant(s)

LEVERS, ANDREW

Examiner

Daniel C. Crane

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 6/16/2005
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_

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## **BASIS FOR REJECTIONS**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

## **REJECTION OF CLAIMS ON FORMAL MATTERS**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10 and 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The purported notional surface is vague as it may or may not be defined because it is dependent upon an abstraction or theoretical concept. Thus, such is considered indefinite for failure to be positively defined.

**REJECTION OF CLAIMS OVER PRIOR ART**

Claims 1-6, 9, 10-16, 19-22 and 27-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Haas (6,089,061). See Figure 2 where the shaped surface 230 or 220 is adjustable. As to claim 3, once the component is shaped, the curvature of the component locks the component in place. The base modules are shown at 520. As to claim 9, see Figure 4B. Figure 2 shows that each module is formed with four shaping elements with each group or module having a plurality of elements. With reference to claim 13, each element is in the form of a beam 505 that establishes a rib-like construction. Since Haas' tool 220 or 230 applies heat to the workpiece, "creep" forming will inherently result. As to claim 30, since Haas can add or subtract the base modules, the modules are adjusted according to needed shaping operations. As to claims 21 and 27, note that a pad 210 is placed between the shaping elements and the component.

Claims 23-26 and 29 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Haas (6,089,061). It is maintained that Haas would inherently inspect the manufactured component to ascertain its suitability for its intended use. Clearly, inspection is an inherent feature in the manufacturing process and it is evident that manufacturing Haas' aircraft components would involve an observation of the initial component construction. Furthermore, trial and error would be clearly involved in this process during the start of the manufacturing so as to eliminate any defective manufactured components during the start-up of manufacturing. In addition, it is the examiner's position that the skilled artisan within the manufacturing art would have recognized the continued pressing and inspection as a series of

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operations until the desired pressing of the component is reached. This is well known in manufacturing and inspection to obtain quality control in the manufactured component.

Claims 32-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Potter (3,550,422). See Figures 4 and 6 where the creep forming method using adjustable shaping elements 21. The finished component 11 is an aircraft component. An aircraft with the finished component 11 results.

Claims 1-7, 11, 16-18, 20, 22, 28-30, 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Nardiello (6,053,026). See the Figures where the aircraft component is shaped by adjustable shaped surfaces 20. Base modules 46 are provided for positioning the shaped surfaces 20 within the base 26. The base modules 46 are adjustable by selectively arranging the appropriate module adjacent the shaped surface 20. See Figure 1A and column 3, lines 11-24, where a pliable bag is used to force the component against the shaped surface. A differential pressure will exist across the two sides.

Claims 1-3, 7-11, 13, 14, 15, 16, 22, 28, 29, 31, 33 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hathorn (1,673,564). See Figures 3, 4, 7 and 9 where the shaping elements 34 are pivotally adjustably mounted to the base so that the aircraft component can be shaped to a specified configuration.

### **PRIOR ART CITED BY EXAMINER**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

### **RESPONSE BY APPLICANT(S)**

Applicant(s) response to be fully responsive and to provide for a clear record must specifically point out how the language of the claims patentably distinguishes them from the references, both those references applied in the objections and rejections and those references cited in view of the state of the art in accordance with 37 CFR 1.111 (a), (b) and (c).

### **INQUIRIES**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner D. Crane whose telephone number is **(571) 272-4516**. The examiner's office hours are 7:00AM-3:30PM, Monday through Friday.

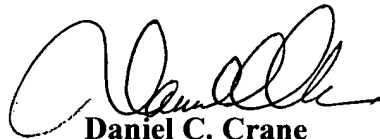
Documents related to the instant application may be submitted by facsimile transmission at all times to Fax number **(571) 273-8300**. Applicant(s) is(are) reminded to clearly mark any transmission as "DRAFT" if it is not to be considered as an official response. The Examiner's Fax number is **(571) 273-4516**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DCCrane  
December 18, 2006

A handwritten signature in black ink, appearing to read 'Daniel C. Crane', written in a cursive style.

**Daniel C. Crane**  
Primary Patent Examiner  
Group Art Unit 3725